

IN THE CLAIMS:

Claim 1 (Previously Presented): A method executed within a processing unit for filtering packets, comprising the steps of:

receiving a packet that includes an encrypted identifier and an unencrypted remainder of said packet, for verifying identity of a first device that sent said packet; ~~while remainder of said packet encrypted;~~

authenticating said identifier;

determining whether to forward said packet to a second device based on result of said authenticating, and a policy relative to said source device; and

forwarding said packet to said second device in accordance with said determination.

Claim 2 (Currently Amended): The method of claim 1, wherein said step of determining comprises:

comparing ~~authenticated~~ decrypted identifier yielded by said step of authenticating to a list of identifiers;

retrieving at least one policy rule relative to said authenticated identifier;

determining whether to send said packet to said second device in accordance with said policy rule.

Claim 3 (Canceled).

Claim 4 (Original): The method of claim 1, wherein said authenticating is performed in accordance with IPSEC standards.

Claim 5 (Original): The method of claim 1, wherein said authenticating comprises:

retrieving a pointer to a security association from an authentication header from said packet;

retrieving a key associated with said security association; and

determining whether said packet is authentic using said key.

Claim 6 (Previously Presented): The method of claim 5, further comprising the step of sending a first message to a third device indicating said identifier is not authentic when said step of authenticating so determines.

Claim 7 (Original): The method of claim 5 wherein said authentication header is an IPSEC authentication header.

Claim 8 (Previously Presented): The method of claim 1, wherein said packet is, in addition, encrypted, and said method further comprises decrypting said packet prior to authenticating.

Claim 9 (Original): The method of claim 8, wherein said packet is encrypted and decrypted using one of group of cryptographic techniques comprising DES, triple DES, HMAC and RSA.

Claim 10 (Previously Presented): The method of claim 1, wherein said policy rule is stored in a policy configuration file at said processing unit.

Claim 11 (Previously Presented): A machine-readable memory whose contents cause a computer system to perform packet filtering, by performing the steps of:

- receiving a packet that includes an encrypted identifier for verifying identity of a first device that sent said packet, while remainder of said packet unencrypted;
- authenticating said identifier;
- determining whether to forward said packet to a second device based on result of said authenticating, and a policy relative to said source device; and
- forwarding said packet to said second device in accordance with said determination.

Claim 12 (Previously Presented): The machine-readable memory of claim 11, wherein said determining comprises:

comparing authenticated identifier yielded by said step of authenticating to a list of identifiers;

retrieving at least one policy rule relative to said authenticated identifier;

determining whether to send said packet to said second device in accordance with said comparison and said policy rule.

Claim 13 (Canceled).

Claim 14 (Original): The machine-readable memory of claim 11, wherein said authenticating is performed in accordance with IPSEC standards.

Claim 15 (Original): The machine-readable memory of claim 11, wherein said authenticating comprises:

retrieving a pointer to a security association from an authentication header from said packet;

retrieving a key associated with said security association; and determining whether said packet is authentic using said key.

Claim 16 (Previously Presented): The machine-readable memory of claim 15, further comprising the step of sending a first message to a third device indicating said identifier is not authentic when said step of authenticating so determines.

Claim 17 (Original): The machine-readable memory of claim 15 wherein said authentication header is an IPSEC authentication header.

Claim 18 (Previously Presented): The machine-readable memory of claim 11, wherein said packet is, in addition, encrypted, and said method further comprises decrypting said packet prior to authenticating.

Claim 19 (Original): The machine-readable memory of claim 18, wherein said packet is encrypted and decrypted using one of group of cryptographic techniques comprising DES, triple DES, HMAC and RSA.

Claim 20 (Previously Presented): The machine-readable memory of claim 11, wherein said policy rule is stored in a policy configuration file at said processing unit.

Claim 21 (Previously Presented): A packet filter for a distributed firewall, comprising:

- an input means coupled to said first network for receiving a data packet from a first device, said data packet having an encrypted common host identifier for verifying identity of a first device that sent said packet via a decryption process, while remainder of said packet unencrypted;

- a first buffer coupled to said input means for storing said received packet;

- a first memory segment containing a list of common host identifiers and at least one policy rule;

- a second memory segment for storing a program for decrypting said common host identifier, authenticating said common host identifier, and determining whether to send said packet to a second device based on said list and said policy rule;

- a processor coupled to said first buffer, said first memory segment and said second memory segment for executing said program; and

- an output means coupled to said first buffer for forwarding said compared data packet to said second device based on said comparison.

Claim 22 (Previously Presented): The apparatus of claim 21, further comprising a second buffer for storing said compared data packet prior to forwarding said compared data packet to the second device.

Claims 23 (Canceled).

Claims 24 (Canceled).

Claims 25 (Canceled).

Claims 26 (Canceled).

Claims 27 (Canceled).

Claims 28 (Canceled).

Claim 29 (Previously Presented): A distributed firewall system, comprising:
a first network device;
a second network device in communication with said first network device;
a packet filter processor for each network device;
an encryption means coupled to said packet filter processor, said encryption means for authenticating source of a packet sent from said first network device to second network device by decrypting an encrypted portion of said packet; and
a system management module to manage said packet filter processors.

Claim 30 (Previously Presented): The system of claim 29 wherein said authenticating comprises:
retrieving a pointer to a security association from an authentication header from said packet;
retrieving a key associated with said security association; and
determining whether said packet is authentic using said key.

Claim 31 (Previously Presented): The system of claim 30 wherein said authentication header is an IPSEC authentication header.

Claim 32 (New) The method of claim 1 where said identifier relates to hardware.

Claim 33 (New) The method of claim 1 where said identifier relates to an IP source address.

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Claim 34 (New) The method of claim 1 where said receiving a packet is unsolicited.